

IN THE SPECIFICATION:

Please replace the second full paragraph on page 10, which starts “According to the invention, the method” with the following:

According to the invention, the method comprises the step (2) of conducting multi-cyclic polymerase chain reactions by a primer extension technique to obtain a product comprising the target polynucleotide sequence; wherein the template used in each polymerase chain reaction is the product obtained in the previous polymerase chain reaction, and all of the fragments of the target polynucleotide sequence used in the polymerase chain reactions in sequence constitute the target polynucleotide sequence. The target polynucleotide is synthesized in fragments during each polymerase chain reaction through un-annealed parts of the primer (as shown in Figs. 1 and 2, primer 5, 8, 61, or 71) for extension by the primer extension technique. The advantage of the invention is that the product obtained in the previous polymerase chain reaction is directly taken as the template used in the afterward reaction without a purification step or other specific processing steps. The labor and time are less than conventional methods.

Please replace the third full paragraph on page 16, which starts “Target polynucleotide sequence” with the following:

Target polynucleotide sequence: PRRSV-ORF 7 is a gene encoding a nucleocapsid protein in porcine reproductive and respiratory syndrome virus

(PRRSV), and the sequence of the gene was obtained from National Center Biotechnology Information (<http://www.ncbi.nlm.nih.gov>). In the sequence, the codon CTA encoding leucine was changed to CTG, CTT, CTC, TTG, or TTA; the codon ATA encoding isoleucine to ATC or ATT, the codons CGG, AGG, AGA encoding arginine to CGT or CGC; the codon GGA encoding glycine to GGT or GGC; and the codon CCC encoding proline to CCG, CCA or CCT according to the table of the codons for a high expression in *E. coli* in the Wisconsin Package. The changes of the codons were listed in Table 1.

Please replace Table 1 on pages 16-19 with the following:

Table 1:

| Aa  | <del>Codon</del><br><u>Codon</u> | Number <sup>1</sup> | /1000 <sup>2</sup> | Fraction <sup>3</sup> |
|-----|----------------------------------|---------------------|--------------------|-----------------------|
| Gly | GGG                              | 13                  | 1.89               | 0.02                  |
| Gly | GGA                              | 3                   | 0.44               | 0.00                  |
| Gly | GGU                              | 365                 | 52.99              | 0.59                  |
| Gly | GGC                              | 238                 | 34.55              | 0.38                  |
| Glu | GAG                              | 108                 | 15.68              | 0.22                  |
| Glu | GAA                              | 394                 | 57.20              | 0.78                  |
| Asp | GAU                              | 149                 | 21.63              | 0.33                  |
| Asp | GAC                              | 298                 | 43.26              | 0.67                  |
| Val | GUG                              | 93                  | 13.50              | 0.16                  |
| Val | GUA                              | 146                 | 21.20              | 0.26                  |
| Val | GUU                              | 289                 | 43.26              | 0.51                  |

|      |     |     |       |        |
|------|-----|-----|-------|--------|
| Val  | GUC | 38  | 5.52  | 0.07   |
| Ala  | GCG | 161 | 23.37 | 0.26   |
| Ala  | GCA | 173 | 25.12 | 0.28   |
| Ala  | GCU | 212 | 30.78 | 0.35   |
| Ala  | GCC | 62  | 9.00  | 0.10   |
| Arg  | AGG | 1   | 0.15  | 0.00   |
| Arg  | AGA | 0   | 0.00  | 0.00   |
| Ser  | AGU | 9   | 1.31  | 0.03   |
| Ser  | AGC | 71  | 10.31 | 0.20   |
| Lys  | AAG | 111 | 16.11 | 0.26   |
| Lys  | AAA | 320 | 46.46 | 0.74   |
| Asn  | AAU | 19  | 2.76  | 0.06   |
| Asn  | AAC | 274 | 39.78 | 0.94   |
| Met  | AUG | 170 | 24.68 | 1.00   |
| Ile  | AUA | 1   | 0.15  | 0.00   |
| Ile  | AUU | 70  | 10.16 | 0.17   |
| Ile  | AUC | 345 | 50.09 | 0.83   |
| Thr  | ACG | 25  | 3.63  | 0.07   |
| Thr  | ACA | 14  | 2.03  | 0.04   |
| Thr  | ACU | 130 | 18.87 | 0.35   |
| Thr  | ACC | 206 | 29.91 | 0.55   |
| Trp  | UGG | 55  | 7.98  | 1.00   |
| Stop | UGA | 0   | 0.00  | (Stop) |
| Cys  | UGU | 22  | 3.19  | 0.49   |

|      |     |     |       |        |
|------|-----|-----|-------|--------|
| Cys  | UGC | 23  | 3.34  | 0.51   |
| Stop | UAG | 0   | 0.00  | (Stop) |
| Stop | UAA | 0   | 0.00  | (Stop) |
| Tyr  | UAU | 51  | 7.4   | 0.25   |
| Tyr  | UAC | 157 | 22.79 | 0.75   |
| Leu  | UUG | 18  | 2.61  | 0.03   |
| Leu  | UUA | 12  | 1.74  | 0.02   |
| Phe  | UUU | 51  | 7.4   | 0.24   |
| Phe  | UUC | 166 | 24.10 | 0.76   |
| Ser  | UCG | 14  | 2.03  | 0.04   |
| Ser  | UCA | 7   | 1.02  | 0.02   |
| Ser  | UCU | 120 | 17.42 | 0.34   |
| Ser  | UCC | 131 | 19.02 | 0.37   |
| Arg  | CGG | 1   | 0.15  | 0.00   |
| Arg  | CGA | 2   | 0.29  | 0.01   |
| Arg  | CGU | 290 | 42.10 | 0.74   |
| Arg  | CGC | 96  | 13.94 | 0.25   |
| Gln  | CAG | 233 | 33.83 | 0.86   |
| Gln  | CAA | 37  | 5.37  | 0.14   |
| His  | CAU | 18  | 2.61  | 0.17   |
| His  | CAC | 85  | 12.34 | 0.83   |
| Leu  | CUG | 480 | 69.69 | 0.83   |
| Leu  | CUA | 2   | 0.29  | 0.00   |
| Leu  | CUU | 25  | 3.63  | 0.04   |

|     |     |     |       |      |
|-----|-----|-----|-------|------|
| Leu | CUC | 38  | 5.52  | 0.07 |
| Pro | CCG | 190 | 27.58 | 0.77 |
| Pro | CCA | 36  | 5.23  | 0.15 |
| Pro | CCU | 19  | 2.76  | 0.08 |
| Pro | CCC | 1   | 0.15  | 0.00 |